



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,082	12/30/2003	Reza Saedi	D2831	6879
27774	7590	06/27/2005	EXAMINER	
MAYER, FORTKORT & WILLIAMS, PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090			TRAN, THUY V	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

52

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/748,082	SAEDI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thuy V. Tran	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 3,4,7 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/30/03</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is a response to the Applicants' filing on 12/30/2003. In virtue of this filing, claims 1-13 are currently presented in the instant application.

#### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 12/30/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Inventorship***

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

#### ***Drawings***

3. The drawings submitted on 12/30/2003 are accepted.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2821

5. Claims 1-2, 5-6, 8, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. (U.S. Patent No. 5,704,213).

With respect to claims 1 and 13, Smith et al. discloses, in Figs. 2 and 3, a temperature controlled arrangement for housing an optical component comprising (1) a package [10] (see Figs. 2 and 3) having an enclosure (which contains laser [16] and other components; see Fig. 2) through which a plurality of electrical connections extend (see Fig. 2), (2) optical components (which are laser diodes) located in the enclosure and electrically connected to the electrical connections (see Fig. 2), (3) a first thermoelectric cooler [12] located in the enclosure and in thermal conduction with the optical components (see Fig. 2), (4) a temperature sensor (which is thermistor [14]; see Figs. 2 and 3) located in the enclosure and electrically connected to the electrical connections, and (5) a second thermoelectric cooler [22] (see Figs. 2 and 3) located external to the enclosure and in thermal conduction with the enclosure (see Figs. 2 and 3).

With respect to claim 2, Figs. 2 and 3 of Smith et al. show that at least one of the plurality of electrical connections electrically connects the first [12] and second [22] thermoelectric coolers.

With respect to claims 5 and 6, Smith et al. discloses, in Fig. 3, that the arrangement further comprises a temperature controller [30, 40] operatively controlling the first [12] and second [22] thermoelectric coolers.

With respect to claim 8, Smith et al. discloses, in Figs. 2 and 3, that the optical component is a laser diode.

Art Unit: 2821

With respect to claim 10, Smith et al. discloses, in Figs. 2 and 3, that the arrangement further comprises a heat sink [11] in contact with a second surface of the second thermoelectric cooler [22] (see col. 4, lines 8-11).

With respect to claims 11 and 12, the temperature controller shown in Figs. 2 and 3 of Smith et al. is a proportional controller (since the temperature is determined or regulated in reference to proportions (see Fig. 3; col. 3, line 57 – col. 4, line 44)).

***Allowable Subject Matter***

6. Claims 3-4, 7, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to disclose or fairly suggest:

- A temperature controlled arrangement for housing an optical component wherein the first and second thermoelectric coolers are electrically connected in series, in combination with the remaining claimed limitations as called for in claim 3 (claim 7 would be allowable since it is dependent on claim 3);
- A temperature controlled arrangement for housing an optical component wherein the first and second thermoelectric coolers are electrically connected in parallel, in combination with the remaining claimed limitations as called for in claim 4; and
- A temperature controlled arrangement for housing an optical component further comprising a thermal conducting element in contact with an outer surface of the

Art Unit: 2821

enclosure and a first surface of the second thermoelectric cooler, in combination with the remaining claimed limitations as called for in claim 9.

***Citation of relevant prior art***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Miguelez et al. (Pub. No.: US 2003/0063637 A1) discloses a method and apparatus for monitoring and maintaining the temperature of an analog laser module.

Prior art Pearson et al. (U.S. Patent No. 5,329,539) discloses an efficient laser configuration.

Prior art Martin (U.S. Patent No. 5,084,886) discloses a laser system with independent heat controls.

***Inquiry***

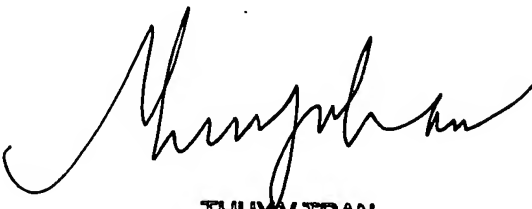
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2821

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

06/24/2005



**THUY V. TRAN**  
**PRIMARY EXAMINER**